

**Plasma Parameters of a Prominence Observed  
on October 16/17, 1999 by SUMER and CDS/SOHO**

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The aim of our study was to confirm and enrich the results obtained so far on dynamics and diagnostics of solar prominences. A prominence observed on October 16/17, 1999 during MEDOC campaign # 4 in the frame of the updated joint observing programme 09 was studied. The main prominence plasma parameters like temperature and density were derived as well as their changes during 8 hours of observations. The relative line-of-sight velocities were obtained in the cool plasma material (SUMER, Si IV,  $8 \cdot 10^4$  K) and prominence-corona transition region (SUMER, O IV,  $2 \cdot 10^5$  K). Velocity and line width maps in both CDS He I 584 Å and O V 629.73 Å were derived. A study of the blend of O IV 1404.81 Å by Si IV 1404.77 Å and the second order line O III 702.31 Å was made.

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